

CLAIMS

We claim:

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1. A thermostat and remote control apparatus, comprising:
 - a housing;
 - an interface disposed in said housing;
 - a plurality of icons on the interface, which correspond to a set of controls for items that are controlled by the apparatus;
 - a display screen, which indicates the current temperature setting, time and date;
 - a recessed program and enter button that allows a user to enter temperature settings to a thermostat;
 - a clear button for deleting any entered information;
 - an electric cradle that is used to recharge the apparatus;
 - a (USB) port and a plurality of serial/ parallel ports that are used to connect a computerized device to the apparatus;
 - an RS-232 port to standardize a transmission of serial data between any devices and the apparatus;
 - a microcontroller for processing information and data;
 - a serial to parallel converter and a parallel to serial converter; and
 - a transmitting means for transmitting a signal to and from an item that can be controlled by the apparatus.

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2. The apparatus according to claim 1, further comprising an entertainment center, and wherein the item controlled by the apparatus is said entertainment center.

3. The apparatus according to claim 1, further comprising a thermostat and HVAC system, and wherein the item controlled and monitored by the apparatus is said thermostat and HVAC system.

4. The apparatus according to claim 1, further comprising household appliances, and wherein items controlled by the apparatus are said household appliances.

5. The apparatus according to claim 1, further comprising devices with an X-10 protocol, and wherein items controlled by the apparatus are said devices with an X-10 protocol.

6. The apparatus according to claim 1, further comprising a security system, and wherein the item controlled by the apparatus is said security system.

7. The apparatus according to claim 6, said security system arranged and configured to open and close windows, lock and unlock doors and windows, open and close drapes and vents, and turn lights on and off on a fixed or random schedule.

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8. The apparatus according to claim 1, further comprising a global positioning locator device.

9. The apparatus according to claim 7, wherein said global positioning satellite device further comprises a programmed stealth alarm mode.

10. The apparatus according to claim 1, further comprising an OCR document scanner, and wherein the item controlled by the apparatus is said OCR document scanner.

11. The apparatus according to claim 1, wherein said electric cradle further comprises a memory media for storage.

12. The apparatus according to claim 1, wherein said electric cradle has a battery charger and chargeable battery pack.

13. The apparatus according to claim 1, wherein the apparatus is capable of communicating with a second thermostat and remote control apparatus.

14. The apparatus according to claim 13, wherein said apparatus has two-way communication capability with the second thermostat and remote control apparatuses.

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15. The apparatus according to claim 1, wherein said microcontroller is connected to a speaker, a microphone, a camera and a plurality of external jacks.

16. The apparatus according to claim 1, wherein the apparatus is configured to have the capability to communicate through the frequency spectrum via a cell telephone, a satellite communication, a global positioning system, a weather radio, WWV time update and local RF intercommunication.

17. The apparatus according to claim 1, wherein a computerized device is connected to a USB port for viewing, keyboard capability and storage media utilization.

18. The apparatus according to claim 1, wherein said apparatus further comprises a built-in timer and clock.

19. The apparatus according to claim 1, wherein said apparatus further comprises voice activated and recognition software.

20. The apparatus according to claim 1, wherein said transmitting means for transmitting information to and from an item comprises an infrared transmitter and receiver.

21. The apparatus according to claim 1, wherein said transmitting means for transmitting information to and from an item comprises a radio frequency transmitter and receiver.

22. The apparatus according to claim 1, arranged and configured such that roll-over communication capability exists between said transmitting means.

23. The apparatus according to claim 1, wherein said apparatus is connected to a digital port for viewing.

24. The apparatus according to claim 1, further comprising health surveillance and monitoring equipment.

25. The apparatus according to claim 23, wherein said health surveillance and monitoring equipment is configured to poll a patient's condition.

26. The apparatus according to claim 1, further comprising pet surveillance and monitoring equipment.

27. The apparatus according to claim 1, further comprising yard and greenhouse diagnosis, surveillance, supervision and maintenance equipment.

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28. The apparatus according to claim 1, further comprising vehicle engine start-up and warming equipment.

29. The apparatus according to claim 28, further comprising the configuration of said remote control apparatus to lock and unlock vehicle doors and to monitor the location of the vehicle.

30. The apparatus according to claim 1, further comprising predetermined and configured additional said remote control units that are arranged and configured to communicate, program, control, monitor and download data and/or programs to one another using one or more of IR, RF, cell, satellite or telephone communication means.

31. The apparatus according to claim 1, further comprising a touch screen and at least one I/O port, said display being an LCD display, and software means internally of the remote control apparatus for controlling, monitoring and processing information and providing an interface for running additional programs, games and communication(s) software.

32. The apparatus according to claim 31, further comprising a parallel bus port for insertion of add-on modules, said bus port being recessed into said remote control apparatus.

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33. The apparatus according to claim 1, further comprising means for accessing one or more other computers from said remote control apparatus, for accessing files for reading, maintaining and updating.

34. The apparatus according to claim 1, further comprising means for TV and/or radio audio-visual communications from said remote control unit.

35. The apparatus according to claim 1, further comprising means for teleconferencing from said remote control unit.

36. The apparatus according to claim 1, further comprising means for monitoring and controlling water and/or air contamination and decontamination.

37. The apparatus according to claim 1, further comprising means for monitoring and controlling one or more of swimming pool water levels, temperature, PH and temperature.

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38 A thermostat and remote control system, comprising:

(a) at least one server computer having a processor, an area of main memory for executing program code under the direction of the processor, a storage device for storing data and program code, and a bus connecting the processor main memory and the storage device;

(b) at least one relational database on said storage device;

(c) a data communications device connected to said bus for connecting said server computer to the Internet; and

(d) a web-based thermostat and remote control computer code stored in said storage device and executing in said main memory under the direction of said processor, the computer program including means for running and controlling the hardware of the thermostat and remote control apparatus.

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39. A controlled remote control apparatus, comprising:
a housing;
an interface disposed in said housing;
a plurality of icons on the interface, which correspond
to a set of controls for items that are controlled by the
apparatus;
a display screen;
a clear button for deleting any entered information;
a (USB) port for the uploading and downloading of
predetermined software and data;
a microcontroller for processing information and data;
a serial to parallel converter, and a parallel to serial
converter; and
a transmitting means for transmitting a signal to and
from an item that can control the apparatus.

40. The apparatus according to claim 39, further comprising a thermostat and remote control apparatus, which comprises:

a\housing;

an interface disposed in said housing;

a plurality of icons on the interface, which correspond to a set of controls for items that are controlled by the apparatus;

a display screen, which indicates the current temperature setting, time and date;

a recessed program and enter button that allows a user to enter temperature settings to a thermostat;

a clear button for deleting any entered information;

an electric cradle that is used to recharge the apparatus;

a (USB) port and a plurality of serial/ parallel ports that are used to connect a computerized device to the apparatus;

an RS-232 port to standardize a transmission of serial data between any devices and the apparatus;

a microcontroller for processing information and data;

a serial to parallel converter and a parallel to serial converter; and

a transmitting means for transmitting a signal to and from said controlled remote control apparatus.